

AMERICAN BEE JOURNAL



GEORGE W. YORK,
Editor.

CHICAGO, ILL., NOVEMBER 21, 1901.

FORTY-FIRST YEAR
No. 47.



A "SUMMERY" VIEW OF
DR. C. C. MILLER, OF M'HENRY CO., ILL.



DR. MILLER'S COZY HOME ON THE HILL.



A LOAD OF M'HENRY CO.'S "BEST CROP"—SIX-SEVENTHS
OF THE CHILDREN OF JOHN WILSON.



MISS EMMA WILSON—DR. MILLER'S SISTER-IN-LAW
AND CHIEF HELPER IN THE APIARY.

THE AMERICAN BEE JOURNAL

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 To prevent the adulteration of honey.
 To prosecute dishonest honey-dealers.

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41st YEAR.

CHICAGO, ILL., NOVEMBER 21, 1901.

No. 47.

✱ Editorial. ✱

A Dr. Miller Number is what might be called this week's issue of the American Bee Journal. When we visited him recently we discovered the original photographs of the pictures shown, and decided to use them in a single number, as we now have done.

As we have described quite fully each illustration, no extended write up by us will be necessary. Still, if there is anything about the pictures our readers would like to know more of, they can easily send in their proper questions to Dr. Miller, when he will reply to them in these columns.

We wanted very much to show a picture of Mrs. Miller, but she said "No" in such a kind, yet decided, way that we felt we must respect her wish. She is a most lovely woman, greatly interested in all the Doctor's work and writings. Of course, you'd expect Dr. Miller to have just such a wife.

As our readers know, Dr. Miller is past his 70th birthday, and yet no one would suspect him of being nearly that age. He retains his youth in a wonderful manner. But that comes from the Spirit that dwells within, and that shines forth in his daily life. It keeps him young and happy. May it also keep him with us yet many years, to bless and to cheer all who are so fortunate as to meet him or read his helpful words.

The 3d International Congress is to be held Sept. 9, 10 and 11, 1902, at Bois-le-duc, Holland, and the program is already published. Among other topics are: The role of bees in fertilizing grain and grape-vines; increase of bee-pasturage; causes of swarming; influence of food upon the brood; length of bees' tongues; foul brood legislation in different countries; adulteration of honey and wax; suppression of fumigation of bees sent from one country to another. The last topic is to be in the hands of our esteemed countryman, Mr. Dadant.

Sampling Honey in the best way is a matter of considerable importance. At fairs or other exhibitions it is important that nothing untidy shall be done, and it is by no means a pleasant thing to have a spoon passed from one person to another or dipped into honey after having been in the mouth. The matter is perhaps more strongly accentuated in the case of selling honey by samples, for a prospective customer, on being handed a

sample of honey in a spoon, has no means of knowing who the preceding taster has been, and in some cases he will plumply say he wants no honey rather than to put in his mouth that which may previously have been in a mouth that was filthy or diseased. The best way to have no suggestion of uncleanness is to avoid the use of anything the second time—in other words, to throw away immediately whatever has been used once. A common wooden toothpick serves a fair purpose, and for sampling comb honey there may be nothing better, for with a toothpick there is no need to break open more than one cell. For extracted honey something a little broader than a toothpick would be better. Some have splints specially prepared, and it might be interesting to learn from those of experience what is the best and most convenient thing.

Spraying Fruit-Trees in Bloom.—An editorial in the Farmers' Review, after speaking of the harm to bees, says:

It has also been discovered that the poison is equally destructive to the life of the pollen, even when the amount of poison is only 9 to 10 parts in 10,000. Even two parts in 10,000 has been frequently found fatal to the pollen. The danger to the pollen is, however, greatly lessened by the fact that the blossoms do not all open at once, but the process extends over several days. In a clump of five apple-blossoms the central one opens first, and spraying at that time kills the pollen in only these open blossoms.

Crate, Rack, or Super.—Something of a controversy is now on in the British Bee Journal as to the proper term to use for the receptacles on the hives that hold sections. The supply catalogs and some of the correspondents have it "crate," while the journal insists it should be "rack." They might do worse than to compromise by using the word in almost universal use in this country—"super." Unfortunately, while there is unanimity in this country as to the written word, the spoken word is by no means always the same. It is just as much out of the way to say "sooper" in place of "super" as it would be to say "coor" in place of "cure."

Moving Bees.—The distance bees can safely be moved—that is, without danger of their returning to the old location unless special precautions are taken—is a matter that depends upon circumstances. It may be two feet, or it may be two miles, much depending upon the time of year. After bees stop flying in the fall, and up to the time when they begin to gather in the spring, they may be moved any number of inches or feet, and there will be little danger of any return-

ing to the old place, because each time they fly out they do more or less marking of the location.

At a time when they are gathering daily, if forage is so plenty that they do not fly as much as a mile from home—providing such a supposition is admissible—then a removal of a mile or more from home would not be likely to be followed by the return of bees to the old location. If they should be working upon basswood five miles away, then a removal of two, three, or five miles in the line of that flight might be followed by the return of a considerable number of bees to the old place, for after working on the trees with which they are already acquainted, it will be in accord with their former habit to make a bee-line for the old home.

Late Feeding of Sugar Syrup—as late as the present date, or at any time during the winter—should only be mentioned to be condemned. If, unfortunately, a colony is still short of stores, supply the deficiency either by means of combs of honey or of "Good" candy. If the work is carefully done, a hive may be opened and a comb of honey placed close up to the cluster of bees without seriously disturbing them. If you have no surplus combs of honey, take an empty frame and fill it with sections of honey, trimming off enough to make them fit in the frame, then hang the frame of sections in the hive. If the bees of the colony extend below the bottom-bars, combs or sections may be shoved under for their use, providing there is a sufficient space under the bottom-bars, as there is in many cases at the present day in winter.

Honey Jimcracks.—"The following is recommended in Progres Apicole," says Gleanings in Bee-Culture. "For want of a better name we will call them 'honey jimcracks.' They are doubtless good in both French and English:"

Mix together one quart of honey, one quart of powdered sugar, one quart of fresh butter, and the juice of two oranges. Incorporate with this, slowly, a little fine wheat flour, and make a dough of it thick enough to be rolled out; knead it, and beat it for several minutes, and finally roll it out with a rolling-pin in layers about half an inch thick. Cut out round cakes, like biscuit, and bake them on a light plate, greased with butter, with moderate heat.

Do Bees Pierce Grapes?—Mr. Gerloni relates in the Austrian Bee Journal that being in a region where grapes are largely cultivated, his neighbors charged his bees with the destruction of grapes. He invited them to a test. Clusters of grapes of 28 varieties were

placed for the bees Sept. 25, but were left untouched the entire day. Next day the clusters of grapes were sprinkled with honey-water. They were vehemently attacked by the bees, the sweetened water licked up clean, yet not a berry injured. September 29 the clusters were changed, sprinkled with honey-water, and five berries in each cluster pierced with a needle. They were promptly licked off, the punctured berries emptied, and the rest left whole. The next day ten grapes were punctured in each cluster, and these alone cleaned out, except two or three berries that had probably been accidentally injured. Black Portuguese grapes were an exception; ripening early they burst open, especially in wet weather, and, of course, were then cleaned out by the bees.

A Good Word for the Blacks is spoken in the Rocky Mountain Bee Journal. A. E. Willcutt has blacks with a tongue-reach of 16-100 inch which gather more than his Italians with 19-100, and he thinks if blacks had had as fair a chance as Italians the blacks would be ahead.

Weekly Budget.

THAT TEXAS HORSEMINT paragraph, on page 706, was written by Mr. Louis Scholl, instead of Editor Root. The wrong credit is clearly an error on our part, as we have since noticed that it is plainly stated in the original article from which the paragraph was taken, that Mr. Scholl was requested to write about the horsemint, after Mr. Root had departed from Texas. We are glad to make this correction.

MR. W. Z. HUTCHINSON, writing us Nov. 10, said:

FRIEND YORK:—When at Buffalo I promised Mr. H. G. Acklin that I would come up to their December convention at Minneapolis, Minn. I have just received notice that it will be held the 4th and 5th. This throws me out of attending the Chicago convention. I am sorry, as I had anticipated having an enjoyable time. Yours truly,
W. Z. HUTCHINSON.

Well, that is too bad. But the meeting will be a good one, anyway. Of course, all would like to have Mr. Hutchinson present, but what will be our loss will be Minnesota's gain.

MR. W. J. CRAIG, the editor of the Canadian Bee Journal, and withal a very pleasant gentleman, was present at the Buffalo convention, and has this to say editorially:

As was previously announced, the exercises consisted principally of questions and answers. We were afraid at first that this kind of program would become monotonous and tiresome, but the interest continued right through, and very much valuable information was imparted. Mr. E. R. Root proved himself an ideal chairman, and perfect order and good humor prevailed during the sessions. Dr. A. B. Mason, the genial secretary, has a happy faculty of making people feel at home. We Canadians were treated with the greatest possible courtesy and consideration; pleased to say we had a good representation.

The Buffalo Convention.

Report of the Proceedings of the Thirty-Second Annual Convention of the National Bee-Keepers' Association, held at Buffalo, New York, Sept. 10, 11 and 12, 1901.

(Continued from page 727.)

USING FOUNDATION FOR COMB HONEY.

"Is it desirable to use drawn foundation in securing comb honey?"

Mr. Wilcox—Some years ago I was called upon to conduct some experiments on the subject of the use of full sheets of foundation and small starters, and, from those experiments, I might say that the result showed that the more comb I gave them the quicker they were filled and finished, hence the drawn comb was the first filled and finished, the full sheets of foundation next, and the small starters last. This question probably relates to the practice of putting in a sheet of foundation to be drawn out half length or more, to be cut up and used in sections as starters for the bees. I am satisfied with that experiment and subsequent experience, that the bees produced more honey if supplied with combs fully drawn. At the same time, I do not think it practicable for the majority of bee-keepers to do it. The difficulty or trouble of getting them drawn out balances the gain, and I prefer to put in the starters and let the bees draw them out and then fill them.

Mr. Heise—I think probably Mr. Wilcox has the key to the question. I thought probably this referred to the artificially drawn combs. Probably it does not.

Mr. Betsinger—I hate awfully to let it stand in that form. My experience is that they will use foundation, do better work and fill the section quicker than they will with the foundation that has been drawn out previously, especially if it has been carried over one season.

FLAVOR OF RED CLOVER HONEY.

"Can any one here tell the flavor of red clover honey?"

J. F. Moore, of Ohio—We have had a good deal of red clover honey down in our section this summer. It is a thing we have never experienced before, and generally after the middle of July the bees seemed to settle back and think they have done all that is necessary, but this summer they have gathered considerable honey from red clover. It is very much like white clover. When you open a hive in which it has been gathered freshly it reminds you of white clover. It seemed to be very white and nice. The bees were at work on red clover and there wasn't anything else to gather. It is in Seneca County, Ohio. Some of the bees were pure Italian; most of them were hybrids. Hybrids are kept more easily than Italians in our section. There was white clover early in the season, but later there was very little of it.

Mr. McEvoy—Every kind of bee has

gathered honey this year from red clover.

Dr. Mason—I suppose there are a good many of those present who have robbed bumble-bees' nests, and if you have, and tasted the honey, you know just about how red clover honey tastes. It has a real, nice flavor.

Mr. Hershisier—Referring to the secretary's remark about bumble-bees gathering red clover honey, I would like to know if bumble-bees do not gather other honey than red clover honey.

Dr. Mason—I think the flavor of red clover predominates. I have tasted of it quite a good many times in different apiaries, and the parties have called my attention to it as having been gathered from red clover.

HONEY FERMENTING IN THE COMB.

"Will honey ferment in the comb?"

Mr. Wilcox—I know it will.

Mr. McEvoy—Yes.

Dr. Mason—That depends on where it is kept. I believe.

Mr. Wilcox—Whenever it is kept warm enough to absorb moisture, and once the moisture clings to the honey, and if it is continued warm and moist, it will ferment. If it is kept warm and dry it is all right. It must absorb the moisture first to ferment.

COMBS OF CANDIED HONEY.

"What is the best method of handling combs that contain candied honey, in the spring?"

Dr. Mason—Uncap it and give it to strong colonies.

Mr. Moore—I would advise uncapping it and pouring water on the comb where it is candied. Bees will use it up.

Dr. Mason—If the honey is moist you need not pour any water on it. If it is dry, pour on some water.

W. L. Coggshall—I would just pile those hives up with the candied combs outdoors where the bees could have access to them, and that honey you can take and put in a wax-extractor and liquefy it.

Dr. Mason—If it is moist, you would not need to do that way.

W. L. Coggshall—I wouldn't pour any water on the combs.

"WHAT IS A TESTED QUEEN?"

Mr. Wilcox—One you have tried and found to be good for nothing.

Mr. Heise—Is that the only way we can tell tested queens?

Dr. Mason—The other is when it has been tried and found to be good.

Mr. Benton—I think some one who has asked that question would like to know what a tested queen is. In popular parlance a tested queen is one that has been kept until we have seen

her worker-bees and know from their markings that they belong to the race they are supposed to belong to. A queen is partially tested as soon as you have seen her deposition of eggs, when you have observed that she has deposited eggs and laid them regularly; but in the popular parlance, it is a queen whose workers you have seen and which come up to the standard of the race she is supposed to belong to. You can carry a test somewhat farther and test her for her queen progeny, test her for their gathering qualities; but I think everybody understands the popular test.

Mr. McEvoy—I like a queen to lay her eggs so that when they come to cap the cells they will all be capped in one day. I do not like an irregular layer.

Mr. Benton—I want the brood to be in solid. It develops better because of its mutual heat. The developing insect develops a great deal of heat, and we can test a queen from the appearance of her eggs.

Mr. Moore—I have an idea that the man who asked that last question would like to know if he has an Italian queen. How would you know the progeny? What is the marking of an Italian bee?

Mr. Benton—The first and prime point is three yellow bands on the anterior part of the abdomen, that is, directly under the wings or near the thorax of the insect. Not necessarily light, because there are dark and light Italians, and I should say that the queen that gave workers showing those three yellow bands and the general large form of the Italian, with a brownish tint over the body that is due to the fuzz on the body, would come up to the standard of an Italian queen, and the more even that marking is the better it would be in that particular respect. An evenness in the points, every worker like every other.

A Member—I would like to ask Mr. Benton if he would deem a bee an Italian that showed four bands?

Mr. Benton—I would say that was a queen that had been produced by selection, but I would not require that the workers had four bands in order to come up to the Italian standard.

A Member—Suppose most of the bees had four bands, but once in a while you saw one with only three, would that be against her?

Mr. Benton—Decidedly. I would not call that a pure Italian bee.

Mr. Wilcox—I agree with Mr. Benton, that uniformity of markings is the most important point.

MISCELLANEOUS MATTERS.

The secretary then read a letter inviting the members of the National Bee-Keepers' Association to the annual meeting of the Ontario Bee-Keepers' Association, to be held at Woodstock, Ont., in December.

Mr. Heise warmly seconded the invitation to the members.

Mr. York—I would move that we as an association accept the invitation so courteously tendered by our friends from across the border, and as many as possible attend their meeting.

The motion was seconded by Dr. Mason and carried.

Mr. York—It seems to me it would be well to have a committee on resolu-

tions to report at the close of the session.

On motion, Messrs. Abbott, C. C. Miller and N. D. West were appointed.

Mr. Benton—I move that the convention adjourn tomorrow at 1 o'clock and meet at the Epworth Hotel in the evening.

The motion was seconded.

Dr. Mason—I move as a substitute that those who wish to go to the Pan-American can do so, and the others remain here.

After a brief discussion the substitute was carried.

Mr. York—I move that the matter of selecting a badge be referred to the Board of Directors.

The motion was seconded by Dr. Mason, and carried.

Mr. York—On the matter of score card, I would move that the same committee that acted last year be re-appointed to act this year. I think Mr. N. E. France, of Wisconsin, was chairman of that committee. Mr. Hutchinson was also a member, and Mr. Hershisier.

The motion was seconded.

Dr. Mason—If I remember correctly, the score card committee last year made a recommendation and it was adopted by the Association.

Mr. York—They reported after the close of the convention, by mail, and that report was printed with the rest of the proceedings. With the consent of the seconder, I will withdraw my motion.

Mr. Hershisier—I move that a new committee be appointed to revise the work of the old committee.

Mr. York—I move that this convention select a committee of five to report on the score card before we adjourn, as recommended last year.

The motion was seconded by Dr. Mason, and carried.

Mr. York—I nominate Mr. Benton.

Mr. Wilcox—I nominate F. Greiner. A Member—I nominate Mr. Miller, of Canada.

The score card is a card recommended to be used by judges at honey exhibits.

Mr. Hershisier—I nominate Mr. Hutchinson.

Mr. Heim—I nominate Mr. Hershisier.

Mr. Benton—I would prefer to withdraw in favor of somebody else.

A Member—Then I would nominate W. F. Marks, of New York.

The motion was put and carried.

It was moved, seconded and carried that the roll of those present be called by States. The result was as follows: Massachusetts 2; New York 42; Pennsylvania 8; New Jersey 3; West Virginia 2; Cuba 1; Texas 2; Missouri 2; Iowa 1; Minnesota 3; Wisconsin 1; Illinois 4; Indiana 1; Michigan 4; Ohio 8; Canada 18; Maryland 1; Connecticut 1; New Hampshire 1; Jamaica 1.

QUESTION ON QUEEN-REARING.

"How many days after the egg hatches in a queen-cell does the queen cease to live on the royal jelly, and what does she then live on?"

Mr. Benton—It varies from 5½ to 6 days; in other words, she lives on this royal jelly or larval food during her whole larval period; the cell is then sealed over, and she then lives on the fatty tissues derived from the food she ate in the larval condition. The tip of the abdomen, or nymph, is inserted in

the food which remains there. I express the opinion that by absorption she does take from this food something in addition, but for the greater part I should suppose that she lives from the food deposits or tissue derived from the food she had eaten while in the larval period. The pupæ of many insects remain over winter—large numbers—and some insects remain two or three years in this condition before they come out, and then we have the 17-year locust that remains 17 years in this condition, living on the absorbed tissue.

Mr. Betsinger—A similar question was discussed within the last two years, and I asked the question how the queen took this food, and of course the answer was given similar to what Mr. Benton gave; but I see he has added that she takes the balance of the food through the abdomen.

Mr. Sleeper—I think I have seen indications that this substance called royal jelly is largely absorbed by the posterior portion of the abdomen during this time after the larvæ is sealed.

Mr. Benton—It might be well for me to say that I expressed an opinion merely; I have a little basis for that opinion. I have noticed that if cells are shaken at a certain period, this juncture of the pupa in the queen-cell is broken, and she drops to the bottom; of the cell and may never emerge after that—it depends upon the state of development if she emerges; and if she emerges, she may be somewhat inferior through having dropped down. My inference was that she was deprived of the final part of the nourishment.

Dr. Mason—I think I have seen cases of that kind where the queen was detached in that way in an early period of the development. It injured the queen very materially.

Mr. Benton—The idea would then be not to handle queens roughly, or to move them as little as possible until the perfect queen has emerged.

MEMBERSHIP QUERY.

"If I fail to renew my membership and renew it afterwards, when does the renewal date from?"

Dr. Mason—The renewal dates from the time you renew. If you are a member of the Association and you fail to renew that membership by the time the year expires, you cease to be a member; so, those of you who are members, don't entertain the idea that you can have the protection of the Association and pay at the end of the calendar year.

DOES COMB COLOR AFFECT COLOR OF EXTRACTED HONEY?

"Does the color of comb make any difference in the color of extracted honey?"

Mr. McEvoy—Take old combs and sprinkle them well with water, shake them, and see if you don't get something a little the color of tea. Take a white comb, shake it and see what you get from that. Now, after a comb has been used several times and extracted, the bees have cleaned it out so much that you cannot see much difference.

Mr. Betsinger—I made it a business to attend a good many fairs and I have seen some pretty fine honey; I have made a great point to find out where it came from, and I believe there is an exhibition today in our State, and the

extracted honey was taken from old combs. There was also honey there taken from new combs. It has not taken the first premium because of its lack of color. Now, I will admit that you can wash old combs and get color from them, but it is not honey. Honey doesn't take on color. You can lay it down in the dirt and it will still be white.

Mr. Wilcox—I would like to ask you if your first extracting is not a little darker in color than the next honey-flow.

Mr. Betsinger—I would say, no, sir. The honey taken the second time is no whiter than the first, but the season in this State is not long enough to get honey from any one blossom; you would have to extract every day to get the same quality; our flowers vary from day to day.

Mr. McEvoy—I have been 18 years an inspector in the Province of Ontario, and I think very few men have more thoroughly tested the quality of old and new combs, and my experience has been that the old combs do give it a shade of color. You will get, perhaps, a little better color of honey from one colony than another.

Mr. Betsinger—Do you mean to say that one colony gets whiter honey than the other from the same field?

Mr. McEvoy—I would not say the same field.

Mr. Davidson—I would like to add my experience to that of Mr. McEvoy. I have been in the extracted-honey business a good deal, and while I do not know that honey will take on color, I do know that honey taken at the same time stored in light and dark combs will have different colors. I have tested it in our extracting in Texas. The bees store the honey in the brood-combs sometimes, and I have to separate those combs and keep them separate from my regular extracting-combs in order to keep from coloring the whole lot of honey. I know it is gathered at the same time and by the same colony.

"Jamaica"—My opinion is that the comb has a lot to do with the color of the honey, because down our way all our honey is pure white. I have known the same honey to be stored in dark or old combs and it brings out a dark honey with a very inferior flavor.

A Member—It occurs to me that perhaps there may be a double meaning. Mr. Betsinger may refer to old combs that have been used a number of years for extracting, and some one else may refer to combs that have been used in the brood-chamber recently and then put into the hive and honey extracted from them. In that case my experience would be that the honey is somewhat colored.

W. L. Coggs—Mr. Davidson, in talking of that matter, said he got more or less bee-bread in the honey, which made it a little bit colored. Mine is almost all buckwheat honey, and, of course, you couldn't see much difference there. I think there is hardly enough difference to make it worth while to bother with.

Dr. Mason—This is an important matter. Some of you produce dark honey only, and that is all, and your opinion isn't worth much. It is only a few years since, that I advocated this matter that it did color, and I was laughed at; and no longer ago than

two years, in the Philadelphia convention, when I spoke of this, President Whitcomb said, "Do you believe that honey dissolves the wax?" Mrs. Harrison recently said something on this subject in one of the bee-papers, "When you want nice, light honey get nice, new combs." Now, I have had a good deal of experience in this line, and this year I have been more thoroughly convinced of it than ever. I have combs that had been used as brood-combs for years, and that had not been used as brood-combs for several years past, and I put them in supers with combs that were never used for brood-rearing; I uncapped the old and the new and extracted, the old combs in one extractor and the new ones in another extractor—and the color was so different that you wouldn't believe it was the same honey. Now, I am so thoroughly convinced of this that, although I have about six full extracting combs to the colony, I am going to destroy every one of them and put new ones in place of them, so that I can have honey not colored by old combs.

Mr. Betsinger—I may be behind the times, but I am not behind in long years of experience. I have extracted, of course, more or less honey from old and new combs, and I would not give a snap of my finger for the difference between old and new combs.

Mr. McEvoy—I don't wish to be understood as saying that using old combs is going to give you a dark-colored honey. I would use it several times before I would think it sufficiently washed out.

Mr. Terrell—I wish to endorse what Mr. McEvoy has said. The question is whether it refers to old combs that have been used for years for extracted honey. This season I have taken combs from old colonies, placed them on top for extracting purposes, and the first honey extracted was decidedly colored, but as I kept on taking off the honey, the last extracting there was not very much difference between the honey from the old combs and the new ones.

Mr. Benton—When the honey is first gathered it is about three-quarters water. Now, if pure water would take on the coloring, why wouldn't three-quarters water and one-quarter sugar?

W. L. Coggs—In sending some bees down to Cuba I sent along some combs, and I left from 10 to 12 pounds of honey in each colony, and it took them that whole season down there to get that dark honey out of the colonies. The bees kept carrying it up, and it took but a very little dark honey to color the white honey.

F. J. Miller—If there is any person who is doubtful about this, if he will pour water into a comb and allow that water to stand half an hour and then pour it out, he will see a decided black color; and if he refills that comb the color will gradually grow lighter. I have invariably found that I could not make an exhibition article of honey from those brood-combs. Commercially speaking, it would not matter, probably, but if you were doing it for exhibition purposes it would make a decided score against you.

Mr. Wilcox—All the arguments go to show that the first extracting is darker colored than the second, but they don't show why, because that color comes from the comb itself, or the accumula-

tion of dust and dirt that may be in that comb during the winter season. I have supposed that it was an accumulation of smoke or dirt which might have gotten into the combs during the winter. I don't know yet whether that coloring is in the comb itself. I shall be slow to destroy my old black combs. I shall keep them and extract from them.

Mr. Betsinger—The gentlemen mention their first extracting as being a little colored. Honey isn't water; it is an oil. You can not make a wash with honey.

Mr. McEvoy—Allow me to explain a little. A member speaks about the first extracting of honey. Now, with me I work so as to have no honey extracted except clover, and the clover from the white combs is a shade whiter on the start than it is from the old combs.

Mr. Betsinger—If you were in a locality where you didn't have one drop of honey in the brood-chamber—none at all to come up into the surplus chamber—then I must say you are a happy man to extract honey.

Mr. McEvoy—I uncap between fruit, plum and clover, and I convert the honey into brood feed. Mr. Heise knows the system I follow, and Mr. Miller knows it. I think that I can prove my case.

Mr. Betsinger—Does any mustard grow in that locality?

Mr. McEvoy—I dare say you could find some, but I myself don't know where it is.

N. L. Stevens, of New York—Is the honey stored in those dark combs affected any in flavor by storing in them?

Dr. Mason—No, sir; it takes a fine taste to tell it. No man who chews tobacco can tell the difference.

SMOKING BEES WITH TOBACCO.

"Is it detrimental to the bees to use tobacco-smoke whenever necessary to open hives?"

Mr. McEvoy—I don't think it is necessary ever to use tobacco-smoke.

Mr. Benton—I would say, decidedly, never use tobacco-smoke on them.

Dr. Mason—I have a strain of bees with which I don't think of using smoke or veil. I take out the combs and shake the bees off without ever getting a sting.

Mr. Benton—I think there are times when some have claimed that tobacco-smoke was useful in introducing queens, but I should think that being strong-scented and producing a strong odor in the hive would probably conduce to the receiving of a queen, and I do not think it is permanently detrimental to use tobacco-smoke on queens.

Mr. Moore—Does tobacco-smoke have a more detrimental effect in conquering very cross bees than just ordinary smoke?

Mr. Benton—I think if used on the ordinary cross Italian bee it is a good thing, but not on Cyprians.

Dr. Mason—I have sometimes tried it in introducing queens, and it has seemed to be a help.

Mr. Hershiser—I tried uniting colonies of bees, or nuclei, to make the colonies strong enough to winter, some years ago, and gave them so much that it made them sick, so that they dropped down to the bottom of the hive; but after they "came to" again they

proceeded to fight it out in the ordinary way.

Mr. Davidson—I have introduced hundreds of queens by using tobacco-smoke, and very successfully, but I would like to add a word of caution—it ought not to be done at any other time than late at night. The way I use it for introducing is right at night; just give them a few puffs of tobacco-smoke and put in your queen—enough to make them so they all feel the effects of the smoke. It is the most successful way I have tried in ten years of introducing queens; but it requires caution to keep down robbing. I use common smoking tobacco, and smoke them till I know they all feel the effect of it.

You can tell by the noise they make running around. I used to use it in the middle of the day, but when smoked in the middle of the day a few strange bees are apt to come in.

ELECTION OF OFFICERS.

The matter of election of officers for the ensuing year was then taken up and the following nominations made:

For President, W. Z. Hutchinson was nominated by Dr. Mason.

Mr. Abbott moved that the rule be suspended, and the secretary be authorized to cast the unanimous ballot of the Association for W. Z. Hutchinson as president for the ensuing year. The motion was seconded and carried, the

secretary cast the ballot, and Mr. Hutchinson was declared duly elected.

For vice-president, O. L. Hershiser was nominated by Mr. Benton. Mr. Hershiser's nomination was seconded, and on motion of Mr. Abbott the rules were suspended and the secretary instructed to cast the ballot for Mr. O. L. Hershiser, who was then declared elected vice-president for the ensuing year.

Dr. A. B. Mason was nominated as secretary, and duly elected in the same manner.

The convention then adjourned till 7:30 p.m.

(Continued next week.)

Contributed Articles.

Queen-Breeding and Improvement in Bees.

BY A. NORTON.

IT is a matter for rejoicing that so much attention is now being given to the improvement of stock in the apiary. In one sense the movement is not new. For years individuals have worked along this line and have done what they could independently, some in one direction and some in another. Even yet the movement has not become systematic; but it has grown so much in magnitude and is attracting so many of our most systematic apiarists and queen-breeders that we may expect to see it assume more and more systematic shape each season, if results do not prove too temporary to warrant its continuance. At least the united efforts of breeders will demonstrate how much dependence may be placed upon this hope of improving our races of bees, so that more intelligent estimates can be formed in the near future than at present. Even yet there is room for betterment in the aims of our improvers, some of whom decry what others are bringing about, and narrow their desires down to certain points, to the exclusion of other desirable ones. But we may hope that broader and so more uniform aims will soon prevail, and that then all breeders will be pursuing the same parallel paths.

Through but few pages of earth's record can we trace back bees and breeding. Geologically we know bees of sundry species as early as the Eocene age of the Cenozoic (or Mammalian) time. The oldest known specimens are found preserved in the Eocene amber, or fossilized wax, on the shores of the Baltic Sea. That was about the time of the first appearance of flowering plants and trees, and before there was any one to domesticate and breed them. There were none even to love the sweetness of their garnerings till the cave bear came, unless animals of some other then existing orders were fond of honey.

How long honey-bees have been the associates of man as domesticated insects can not be even conjectured. Historically, the searches into this question that we have seen from time to time in the American Bee Journal have carried us well into antiquity, but have not brought us to any answer. They have shown, however, that anything like intelligent handling and careful breeding is by no means ancient, and that our present improvements have been accomplished within a short period. While we should avoid over-conservativeness, or "old foginess," in regard to progress, we may, on the other hand, get into over-enthusiasm in our visionary hopes.

In considering the subject of breeding bees, and the possibilities that lie therein, men are liable to let preconceived ideas carry their hopes, if not beyond the possible, at least beyond the probable. Yet any who may have excessive expectations of what breeding may bring forth, are likely more wrong in their premises than in their conclusions. If the theories we are just now told we must believe or be behind the times, are true, that life evolved from dead matter and man originated in some monkey, and so on back in formless protoplasm, why need we limit our ambition in the line of breeding? Let us produce *Apis dorsata*, or something just as good, from the bees we already have, instead of searching Asiatic jungles for them. Let us breed bees from wasps, or,

perchance, develop mosquitoes into storers of nectar instead of probers for blood.

Domestication hastens variation and increases it; but the balance of variation and heredity will always continue stable. Natural selection, therefore, may be considered as God's preventive of degeneracy, and not a substitute for creation; and, as surely as God circumscribed the ocean, He has also set the bounds of propagating organisms—"So far shalt thou change, and no further." Logic may lead us astray in these matters. If we reach the North Pole and keep on traveling, we will be getting away from it. So it is with truth, which is the only science; for logic, assumption, and speculation are not science.

Take, for instance, the familiar illustration of the deer and the wolves. The fastest deer can save their lives and breed faster offspring; and thus their speed has been attained, say logic, assumption and speculation. This necessitates the assumption that they once were slow. Do we know this to be a fact? How did they become slow if not by a process of evo-



DR. MILLER ILLUSTRATING TO A VISITING FRIEND THE CROCK-AND-PLATE FEEDER IDEA (USING TUMBLER AND SAUCER.)

lution from some other condition? But, dismissing this little difficulty, we give assumption, speculation and logic full play, and conceive that once the wolves were so slow they could not catch the deer; and the deer were so slow they could not get away from the wolves. But the stern necessity for catching deer, and the pressing need of eluding wolves, have tended to make the wolves so fleet that they can overtake the deer, and the deer so swift that they can keep ahead of the wolves.

By like reasoning from assumption, we can prove that bees once had tongues too short to get the nectar from corolla-tubes; so how did they live, unless the corolla-tubes were too short to withhold their nectar? Then the flowers so lengthened their tubes as to bar bees from getting their nectar and cross-fertilizing them; and the bees' tongues so lengthened that they could get the nectar and fertilize the flowers. Of



DR. MILLER'S FARM-WAGON LOADED WITH BEES
FROM THE OUT-APIARY.

course this was all since the time when flowers had no nectar at all, and bees had no use for honey, but made their living in some entirely different way. However, we must sadly admit that no assumption and logic based on natural selection can satisfactorily explain the uniformity of color in worker-bees, especially when we consider how variable in this respect are both queens and drones—the progenitors—and how shockingly they disregard all color-lines in mating; also, how little they could tell (if they wanted to know) what complexions their children would have, from the looks of each other.

But coming more directly to the subject of breeding bees, we really face the fact—which in proportion as it is known constitutes so much true science—that by careful selection we may induce changes in our bees in various directions until we reach the limit which the Creator has established: but beyond that we can go no further. The evolution of the yacht has shown continual increase of speed for many years. But the fact that this year's "Constitution" couldn't outsail last year's "Columbia" awakens us to the realization of what we should have already known, that the speed of sailing-vessels can not increase forever. A swifter yacht than "Columbia" might yet be built; but some vessel must some time be built than which none can be made any swifter. And so with bees, or poultry, or anything else domesticated. But we should strive to improve as far as improvement can be made. If we take care of the improvements, the limits will take care of themselves.

The writer does not assume to tell eminent and successful queen-specialists what they should do to better their strains; he will be content if he brings out any established truth that they may have overlooked, or the "laity" have forgotten. It is a mistake to assume that development can be carried on in only one direction at a time. Our Italian bees may be made (and they have been made) better in more respects than one. To take any one example among domestic animals: the Houdan fowl was in some period bred into one having a large, shapely crest and muff, a peculiar comb, regular characteristics of color, good size, great prolificness in egg-laying, and small amount of offal, and with the sitting instinct about entirely bred out. And with all this the fowl is hardy and strong. Now all these make a great many features to work for in the same breed, but the result was surely achieved. And we can find the same to be true of too many varieties of fowls, cattle, etc., to be mentioned. Hence we may conclude that we need not look to long tongues alone in breeding bees. We can carry on simultaneous improvements in hardiness, length of life, length of tongue, gentleness, beauty, and other points, until we reach the bounds of each. Do not, therefore, decry any one of these because it is not what you have been developing heretofore; and do not be in such great haste to develop one that you forget to keep up the others. It is true that inability to control queen-mating is a great handicap; but enough has already been done to show that progress can be made despite this obstacle; and, besides, those who make so much of natural selection must admit that it has less control of mating of queens and drones than man can exercise.

The idea is often advanced that crossing would be a means of improving varieties. This does not seem in keeping with all the facts. If crossing carries the better points of parents into the offspring, it carries the poorer ones as well. In crossing you cannot say what shall or shall not be perpetuated. From its very nature crossing does not carry characteristics bodily from either parent so much as it divides or averages those of both. If each had one good point carried to excess, the cross might make a better average; but its greater

variability, resulting in more types to select from, would be offset by the greater difficulty of making the mongrels uniform and stable. Hence, there is more hope in selecting from the best among established varieties, because each step is more easily kept.

And, finally, it should be urged upon the masses of apiarists to patronize the regular queen-breeder. Especially does this apply to those who live in districts rich in honey and filled with bee-keepers. You are far more at your neighbor's mercy and under the power of wild bees than is the case in any other kind of stock-raising. The majority of your neighbors will not try to improve. No matter what you may try to do in the way of bettering your stock, you must lose it through the swarms of drones from inferior stock produced around you. You must, more or less often, have recourse to the permanent improvements made by breeders who have succeeded in getting places where their own drones mate with their queens. You thus help yourselves, and at the same time help the breeders to maintain the business which you would be sure to miss should it fail through lack of patronage.

Monterey Co., Calif.

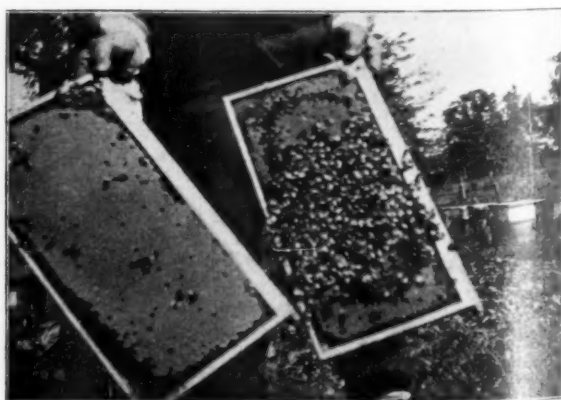


Quoting the Honey Market—Other Matters.

BY FRANCISCO BROWN.

I WISH to add my approval to that portion of Mr. Cooley's criticism, on page 563, in reference to the commission-houses quoting fully up-to-date. *I am particularly interested in the market quotations, but I wish them up-to-date.* There is a feature in one of the bee-papers, if no more, of which I *distinctly disapprove*, in reference to said quotations, and that is, a house, quoting regularly, depreciating the bee-keepers' interests by cry of "overstock," or words to that effect, and creating the impression that the price is going down, and then saying, "We are not a commission firm." This kind of quotation is simply advertising their own honey. I wonder if the publishers of that paper would give all the rest of us a standing "ad" by telling them honey was worth so and so. I'll warrant the honey-dealer referred to does not tell his customers that honey is "down," "big crop," etc. I have dealt with commission-houses in honey for 15 years. Some, like the Horrie-Wheadon concerns, have treated me scandalously, and others have treated me remarkably fair. Under the present conditions of business we cannot well get along without the honest commission men. In some instances the producers are the gainers by consigning their product—not selling outright. How? Why, if we have a fancy, gilt-edged article, it brings the top price when buyers bid against each other. When we wish to sell outright, maybe only one or two buyers come along. For my part, I want the commission man, and I want him to know that I am alive—to my business; that the house that gets me the best price is the one that handles my honey. I have been converted to this decision more than once. To illustrate:

I once had a crop of extracted honey that I wanted to sell outright. I offered it at 8 cents, and would have taken 7. After sending him a sample, a commission man wrote: "Send me your honey—I will sell to best advantage, and you will be the gainer." I sent it. He put it into small glasses, and sold it at 16 cents, netting me 12 cents a pound. In the course of time this man sold nearly 50,000 pounds for me, selling my



TWO COMBS IN DR. MILLER FRAMES.

One frame dripping with bees, and both so filled with sealed brood there is no room in them for honey.



SAMPLE OF DR. MILLER'S "PAT MURPHYS."

Half-bushel (16) Carmen No. 3, weigh 28½ lbs.; 3 largest weighed 6 lb. and ½ oz. The stick lying on them is a foot rule.
Photographed Oct. 11, 1898.

comb honey for 16, 17 and 18 cents, when the best cash offer I received was 11 and 12 cents.

THOSE "HINTS ON HIRED HELP."

Tell Mr. Hyde (page 564, "Hints on Hired Help in the Apiary") to be thankful indeed that his ideal helper is not to be found. If conditions would regulate hired help to do all we want to exact of them. Mr. Hyde and a lot of the rest of us would be hired help. It provokes me as much as anyone to see hired help do things awkwardly, carelessly, or without thought or judgment, that a little reasoning would obviate. And yet these very things are necessary, or there would be no hired help—all would be owners—for it doesn't cost much to start with bees. Its details, especially, are our capital. So do not expect hired help to furnish the capital, and give you the lion's share of the earnings. A banker once asked for a cashier. Said his friend: "I can send you an honest young man, who knows nothing of banking." "That is the man I want," exclaimed the banker, "for I can teach him my methods and system, and he will not have to unlearn knowledge that I do not want in my business." Much so with hired help, especially in the apiary. Either make a partner of the man at once, or hold yourself in reserve, and let him realize he is only a part of the machine.

LOSS OF BEES BY COMBS MELTING DOWN.

In regard to Mr. Gerelds' loss of bees by melting down (page 566), the lack of water I do not believe had anything to do with the bees. All the colonies probably melted down within the space of an hour; when the breeze lulled had they been out in a 10-acre field the loss would not have been 10 percent, if that. We have long, hot summers in Florida, often getting up to 95 and 100 degrees, and last year, in August, it was 105 and 106 degrees on two different days, still I did not lose a single colony from melting down, and in several apiaries that I am acquainted with there was no loss whatever in this line. If Mr. Gerelds will raise his colonies on benches, and will put the two rows of hives about eight feet apart, then put a roof over them, extending it well over the sides, he will have a comfortable place for his bees, and also a comfortable one to work in.

In Florida a large ant is very troublesome to bees, often destroying a good colony in a single night. If there are any to contend with, hang the benches with wire from above, instead of having legs, or attach to the posts of the shed; then daub coal-tar on the wires, and the ants will be rid of.

The most serious charge against shed-apiaries—and I have four in use, some of them several years—is the failure to get queens mated in colonies so kept. But to offset this, there is the satisfaction of having everything under cover, out of the rain, and the ease of manipulation when all colonies are close together. You can have all under lock and key by using 6-inch fence-boards on the sides, leaving a space of eight inches or a foot opposite the hive-entrances, and then stretch a strand or two of barbed wire along this. For 10-frame hives allow 20 inches space each in length of building. At one end have your work-room, made bee-tight by use of burlap or mosquito netting—I use old corn and oats sacks ripped up—in which have a table and your extracting outfit. I mention the use of burlap instead of wire-cloth on account of the latter rusting out quickly in our moist climate. Florida, Sept. 7.

* The Afterthought. *

The "Old Reliable" seen through New and Unreliable Glasses.
By E. E. HASTY, Sta. B Rural, Toledo, O.

SPECIAL FACILITIES FOR MOVING BEES.

It seems that the Atchleys are so inclined to the perambulatory, pick-up-and-start kind of bee-keeping that they have 200 special hive-shells or cases into which bees and combs are put for moving, and taken out on arrival. As special wagons also are provided I infer that the cases are made of light materials—so light, and so much wire screen that they might crush on the road if the wagon body did not embrace each one and furnish the strength. How about this? Is it a winning idea; or is it too much expense? It stops, once for all, the smothering of bees—also the crushing of bees, so far as that comes from combs getting loose and thrashing around; but it can hardly stop new, weak combs from breaking out of the frames. Wonder if the imprisonment of each colony is supplemented by an outside screen over the whole concern. That would reduce to a very decided minimum the stinging of horses. I suppose one idea is that bees which do not get killed enroute, many of them have their lives shortened by what they suffer. If that's the case it may pay to spend some time and money to have the honey-gatherers arrive at honey Canaan in perfect order. Still my fancy hears some brother saying, "Too many traps and calamities;" and, "If I had such an outfit I shouldn't actually get to use it, on account of the time and fuss it calls for." Page 630.

STACHELHAUSEN AND LARGE BROOD-CHAMBERS.

Stachelhausen seems to favor decidedly the large brood-chamber. He strikes an idea pertaining to the matter which is not familiar to all of us. Let the queen lay all she can for a spell early in the season and she wants a partial rest when the main harvest is on. On the other hand, let the queen be obliged to restrict her laying to a mere fraction of what she is capable of, and her time to avenge herself will probably come eventually; and very likely it will come just when moderate laying should mean more surplus honey. It occurs to me that the very worst cases of this could happen in a very big hive with large frames, if the colony itself came through very weak in the spring. Page 630.

LEGISLATION FAVORING FRAME HIVES.

Aha! Ye legally appointed inspector, inspect he never so wisely, cannot inspect to any purpose the apiary where all the combs are built criss-cross. That is, he can't when foul brood is nicely beginning in 20 colonies, and none have yet got putrid or weak. To meet this case, our legislative man, Hambrough, wants everybody compelled by law to have bees on actually movable frames. Sounds seductive. But if we begin with that kind of legislation where will the end be? Where, indeed, till every dog is law-bidden to wag tail, "Down, left, right, up," as the singing-master would have him? And what shall we answer if some one at the state-



HOME FROM THE OUT-APIARY.

Dr. Miller and Miss Wilson in bee-wagon used for going to and from out-apiaries, hauling home honey, etc.; drawn by "Beauty" and "Dandy."

house inquires, "Is it advisable to pass eleven laws for ten men?" Page 631.

PACKAGES FOR RETAILING EXTRACTED HONEY.

It is not so much by shouting our conclusions at one another that we shall conjure up the ultimate truth from the bottom of the well, as it is by candidly laying our real experiences side and side. Mr. Davenport finds his customers don't return packages worth a cent. I find mine, pretty much all of them, so carefully conscientious in the matter that keeping a memorandum book, to show where the out pails are, seems rather a waste of time. Are my customers so much higher in their moral level than his? Improbable. What then? The full answer to that question is not likely to be reached except by a good deal of grubbing—perchance by a good many grubbers. I'll only just begin a little at one corner of the subject. Folks of low-average honesty, if they *think* (rightly or wrongly) that they have paid too much for the contents of a package, will gobble the package itself—as reprisal in part. I have several times tried to sell in the city by means of an intermediary, he to fix his own prices, and the result is a heavy loss of pails. Page 631.

THE LEAKY HONEY-BARREL.

Davenport's experience with barrels should be noted. All leaked; both soft wood and hard wood, although dried for two years. Wax and warrant both failed. The wax cracked; and as for the warrant, honey doesn't seem to understand the meaning of a warrant at all. Page 631.

Questions and Answers.

CONDUCTED BY

DR. C. C. MILLER, Marengo, Ill.

(The Questions may be mailed to the Bee Journal office, or to Dr. Miller direct, when he will answer them here. Please do not ask the Doctor to send answers by mail.—EDITOR.)

Packing Bees for Winter—Other Questions.

1. I purchased 40 colonies of black bees, 20 in Falcon chaff hives and the rest in box-hives. The entrances of the chaff hives are only $\frac{3}{8}$ by 12 inches. Do you think that large enough for winter and summer?

2. Would you advise me to take the inner cover off of the brood-chamber and put burlap over the frames, and pack with forest leaves?

3. Would it be all right to raise the brood-chamber say $\frac{3}{8}$ inch in the summer, or would it cause the bees to loaf between the bottom-board and brood-chamber?

4. The frames have never been manipulated in these hives, and are badly braced and burr-combed. Would you advise transferring the bees and using full sheets of foundation?

5. The hives are painted red. Do you think it advisable to paint them white?

6. Would it be well to leave the packing around the brood-chamber all summer?

7. Is there any danger of using too much bi-sulphide of

carbon in fumigating the honey? Does it taint the honey? About how much should one use to fumigate 100 pounds? Does it matter in regard to quality?

8. I wish to prevent increase. What method would you recommend? NEW YORK.

ANSWERS—1. For out-door wintering such an entrance is large enough. For hot weather, and for wintering in the cellar, I should prefer it much larger.

2. That's a good plan.

3. It would be all right.

4. If combs are straight and there is no trouble except the brace and burr combs, it would be a waste to transfer. Just cut away all the superfluous burrs and braces.

5. White is generally preferred, but if hives are in the shade it makes little difference.

6. Most bee-keepers prefer to remove the packing for summer.

7. An excess is not likely to do any harm, as it evaporates rapidly. Two tablespoonfuls would be enough, or more than enough, for 100 lb of honey if placed *over* the honey and closed up tight. I think you need pay little attention to quality. See interesting discussion in the report of the Buffalo convention, page 502.

8. I hardly know; there are so many ways. One way is to double up in the fall to nearly the number you want, and, if none of them die in winter, to do some more doubling-up in spring. Another way is to remove the old queen when a prime swarm issues (if your queens are clipped they will be destroyed if you let them entirely alone), and then as soon as the first of the young queens issues—which you may know by hearing the young queen pipe in the evening—destroy all remaining cells; or, return the swarm as often as it issues with the young queen.

* The Home Circle. *

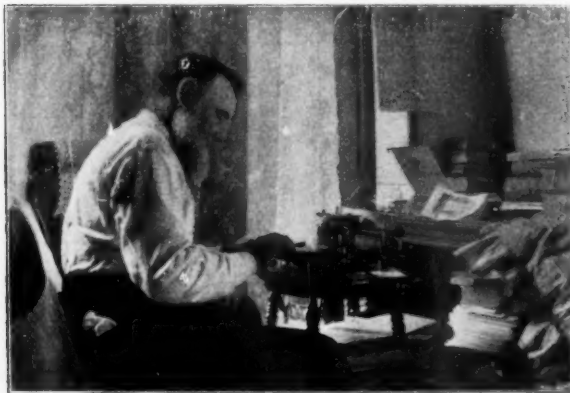
Conducted by Prof. A. J. Cook, Claremont, Calif.

OUR COUNTRY.

If there is any one thing that should make our hearts well up in gratitude more than any other thing, it is the thought of our incomparable country. True, the home comes nearest to us, and touches our hearts and lives with the best gifts. But our American homes could not exist outside of America. Britain is the only other country that comes within telephone call of us in matter of homey homes. And Britannia pales, as poverty crowds comfort, health, and even life, from so many of Britain's households. Think! any boy—the poorest—can safely aspire to his own beautiful home in this grand American country. Industry and economy are sure to win thrift; and the American who does not reach competency, and a cosy, comfortable home, hardly deserves either.

I believe the best gift or possession that any boy or girl may fall heir to, is a good education. It can not be too broad or liberal. Even the day-laborer would be vastly better off with a good education. Were I to train a boy for the farm, I would have him pursue a course as thorough as that coveted by the would-be lawyer or physician. I would urge that he get all he could in the college; that he go then to the university for graduate work; and then it would do him no harm should he study abroad for a year or two. Do you say that this would illy fit him for agriculture? I know it need not, for I have the proof. Isn't it the glory of our magnificent country that any boy of will, energy and determination can, all unaided, secure all of this, if he is only so fortunate as to be an American? I know he can, for here again I have the proofs.

I have just been rejoicing in some statistics that fill my heart with gratitude as an American citizen. Our total debt now is \$1,100,000,000. It was three times that at the close of the war. Yet this in the face of the fact that the war cost our Government more than \$6,000,000,000, if we take direct and indirect expenses, such as pensions, etc., into account. In 1860, when our credit was at the worst, we could not borrow money for less than 12 percent. Now our 2 percent bonds are at 8 percent premium. Our present debt is \$14 per capita, Russia's is \$24, with a great army of people who are wholly impecunious. Even England's debt is \$75 per capita; and that of France reaches the alarming



DR. MILLER "TOUCHING OFF" COPY FOR THE BEE PAPERS.



PART OF DR. MILLER'S HONEY CROP SEVERAL YEARS AGO.

sum of \$150 per capita. More than this: All the debt-laden and burden-bearing countries of Europe are sinking deeper and deeper into the slough of debt and despondency, while America is as steadily and surely rising from under the weight of even her small obligation. Under our present wise management our debt will sink to \$600,000,000 in 1908, and will be all wiped out in 1920. I do not need to live to be nearly as old a man as was my father when he left us, that I may with the fullest expectancy look to see our beloved country wholly free from debt.

If there is one topic that may well claim much time about the dear home circle table it is this: "Our Country; the dearest, truest, best the world knows."

DEBTS.

It is a natural and easy step from national to personal debt. Would it be far from wrong to say that a major share of the worry and discouragement of the world comes through debt? Lifting the mortgage is the burden that holds many a man in bondage, and that darkens many a home. It is a privilege which all of us parents ought richly to prize, so to influence in the home circle that our dear ones may never smart under the severe lashings of debt. My father was a living example of the wisdom of the

scriptural text, "The wages of him that is hired shall not abide with thee over night until the morning." The command, "Owe no man anything," meant to my father just what it reads. He taught us children to avoid debt as we would any other evil, and his example always enforced his teachings.

How much of unrest and discontent his kindly influence has saved me. I have never known the worry of debt. Nor has it stopped here. My children have been taught as I was, and I rest in the firm assurance that they will never be harrassed by constable, sheriff, or creditors; and thus, as "the evils of the fathers are visited upon the children unto the third and fourth generation," so, too, are the blessed influences of parents carried down not only to second and third generations, but to all our descendants.

It is so easy to contract debts when the habit is once formed. It is so hard to meet them when due. And does not the debt, like any other evil, court the lie and the fraud? And so on to the end of the gruesome chapter.

I heard a story the other day like this: A mother told a boy he must not go bathing. When he came home she said, "John, you have disobeyed me." He looked her sheepishly in the face and denied it. She said, "How, then, comes your shirt on wrong side out?" He replied, "I turned it crawling through the fence."

As surely as disobedience courts the lie, just so surely does debt court untruth, fraud, and imposture.

THE MOCKING-BIRD.

We have him in California. Just the same one that regales our friends of the Carolinas in the East, with his incomparable song. He nests in the pepper near our house. Who would not plant trees if only to attract the bird-singers? I am glad he and his spouse have children, and lots of them. The little nestlings call forth the song. Who could sing if there were no little nestlings? He is not content with hymning his delight in the morning, but pours out his heart's best gratitude at noon and at night; and even in the darksome hour of midnight. Just now one is singing just out my window, as if he would waken, in all, the delight and gratitude he feels. He has done just this for me. I am glad of the trees, the birds, and I revel in the songs of our birds. I do not see how one "with clean hands and a pure heart" can suffer very serious worry or ennui with a concert of bird-friends ever sounding in his ears.



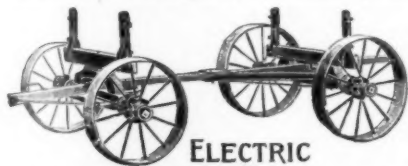
Satisfied People.
That's the kind that use the
MARILLA
Incubators and Brooders.

If they are not satisfied we refund their money. Larger hatches, perfect system of regulating temperature, moisture and ventilation. All these points explained in our catalog. Sent for two 3c stamps.

MARILLA INCUBATOR COMPANY, BOX 3, ROSE HILL, N. Y.

Farm Wagon Economy.

The economy of this proposition is not all found in the very reasonable price of the wagon itself, but in the great amount of labor it will save, and its great durability. The Electric Wheel Co., who make this Electric Handy Wagon and the now famous Electric Wheels, have solved the problem of a successful and durable low-down wagon at a reasonable price.



ELECTRIC

This wagon is composed of the best material throughout—white hickory axles, steel wheels, steel hounds, etc. Guaranteed to carry 4000 lbs. These Electric Steel Wheels are made to fit any wagon, and make practically a new wagon out of the old one. They can be had in any height desired and any width of tire up to 8 inches. With an extra set of these wheels a farmer can interchange them with his regular wheels and have a high or low-down wagon at will.

Write for catalog of the full "Electric Line" to Electric Wheel Co., Box 16, Quincy, Ill.
Please mention Bee Journal when writing.



A Good Year for Bees.

This has been a good year for bees, with the exception of a drouth we had in the middle of the season. I commenced the season with four colonies, which I increased to 11, and got about 450 pounds of honey. The colonies are all strong, with plenty of stores to take them through the winter. I winter them in a shed built for that purpose, packed in straw, and they seem to do well.

The American Bee Journal comes promptly every Thursday, and I always watch for it with pleasure. I could not get along without it.

FRED R. HAWKINS.

Edgar Co., Ill., Nov. 7.

Selling and Shipping Honey.

My attention has been called to a letter on page 670, from C. H. Harlan, who speaks of his treatment by B. Presly & Co. of St. Paul. In justice to a firm which, I believe, holds the highest reputation in the Northwest, I must say that I have shipped honey and apples to them for the past three years, and not only have they always gotten me the highest market price for my shipments, and that without any unreasonable delay, but I have never had to ask twice for a check or a settlement.

I am aware that there are quite as many black sheep among commission men as there are inexperienced shippers among honey-producers. To the former I will give no quarter if I ever come across them; to the latter I will

To make cows pay, use Sharples Cream Separators. Book "Business Dairying" & Cat. 212 free. W. Chester, Pa.



Courtesy of the Marengo Republican.
CHURCH WHERE DR. MILLER ATTENDS.

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If you are interested in Sheep in any way you cannot afford to be without the best Sheep Paper published in the United States.

Wool Markets and Sheep

has a hobby which is the sheep-breeder and his industry, first, foremost and all the time. Are you interested? Write to-day.

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26 cents Cash paid for Beeswax.

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That covers the whole Apicultural Field more completely than any other published, send \$1.25 to

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FOR HIS—

"Bee-Keeper's Guide."

Liberal Discounts to the Trade.



CAN'T YOU BEAR

one or two cents more on a rod for PAGE Fence? PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.

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BEST Extracted Honey For Sale

ALL IN 60-POUND TIN CANS.

Alfalfa Honey

This is the famous White Extracted Honey gathered in the great Alfalfa regions of the Central West. It is a splendid honey, and nearly everybody who cares to eat honey at all can't get enough of the Alfalfa extracted.



Basswood Honey

This is the well-known light-colored honey gathered from the rich, nectar-laden basswood blossoms. It has a stronger flavor than Alfalfa, and is preferred by those who like a distinct flavor in their honey.

Prices of Alfalfa or Basswood Honey:

A sample of either, by mail, 10 cents, to pay for package and postage. By freight—two 60-pound cans of Alfalfa, 8 cents per pound; four or more cans, 7½ cents per pound. Basswood Honey, ½ cent more per pound than Alfalfa prices. Cash must accompany each order. You can order half of each kind of honey, if you so desire. The cans are boxed. This is all

ABSOLUTELY PURE HONEY

The finest of their kinds produced in this country.

Read Dr. Miller's Testimony on Alfalfa Honey:

I've just sampled the honey you sent, and it's prime. Thank you. I feel that I'm something of a heretic, to sell several thousand pounds of honey of my own production and then buy honey of you for my own use. But however loyal one ought to be to the honey of his own region, there's no denying the fact that for use in any kind of hot drink, where one prefers the more wholesome honey to sugar, the very excellent quality of alfalfa honey I have received from you is better suited than the honeys of more marked flavor, according to my taste.

McHenry Co., Ill.

C. C. MILLER.

Order the Above Honey and then Sell It.

We would suggest that those bee-keepers who did not produce enough honey for their home demand this year, just order some of the above, and sell it. And others, who want to earn some money, can get this honey and work up a demand for it almost anywhere.

GEORGE W. YORK & CO., 144 & 146 Erie St., Chicago, Ill.

say, consult your "A B C of Bee-Culture" as to the safe methods of shipping comb honey, and don't be surprised if you get low prices for honey which arrives at its destination in a leaky condition.

Notwithstanding our efforts to introduce honey as a staple article of diet, it yet remains more or less of a luxury; and those who can afford luxuries can afford to insist on their grocers supplying them with clean and appetizing ones. Who can then blame the grocers for preferring a case of honey which looks clean and fresh, to one that is sticky, and consequently dirty? WALTER R. ANSELL.

Ramsey Co., Minn., Nov. 8.

Report from Alabama—Bitter Honey.

I have had fair success this year for this locality, considering the very limited time I can give to the bees, working as I do in railroad shops, and having only evenings. For the first time since I have been keeping bees they stored a surplus from white clover. I got about 200 pounds. The flow was stopped by drouth, which was followed by excessive rains; then again a very dry spell, so I got no more honey till this fall, when quite late there came a good flow, which proved to be the best fall honey I ever got here, except 2 colonies out of 26 that had bitter honey (from yellow fennel). I do not know the source of the rest, but from the time the flow commenced I noticed a peculiar, faint, sour smell from the hives, stronger in the night; this odor is slightly noticeable in the honey, which was so very thick that it was hard to extract, and candied solid in a week or 10 days, exactly the color of butter. I got about 30 gallons. Have you any idea what plant they got it from? ALBERT E. ISAAC.

Morgan Co., Ala., Nov. 5.

[We can not even guess as to the source. Perhaps some of our Southern readers can tell.—EDITOR.]

Introduction of Queens.

MR. EDITOR:—I am not greatly interested in the philosophical discussion between Messrs. McNeal and Whitney, but I am interested in the matter of introducing queens; and if there is some way easier than the usual ones I want to know it. If Mr. McNeal's plan of introduction may be relied on as safe, there will be advantage in using it, but sometimes a little deviation will result in failure. In one respect his instructions seem hardly explicit enough. He says: "Do not smoke the bees constantly, but smoke and pound alternately, for two or three minutes only." That may mean to smoke two or three minutes, then pound two or three minutes, then smoke two or three minutes, and so on. If that is the meaning, will he please tell us how long, in all, the pounding and smoking is to be continued? It may, however, mean that the whole time of pounding and smoking is to be only two or three minutes. If that is the meaning, will he please tell us how long to smoke each time, and how long to pound? For it might make some difference whether

Standard Bred Queens.

Acme of Perfection.

Not a Hybrid Among Them.

IMPROVED STRAIN GOLDEN ITALIANS.

World-wide reputation. 75 cts. each; 6 for \$4.00.

Long-Tongued 3-Banded Italians

bred from stock whose tongues measured 25-100 inch. These are the red clover hustlers of America.

75c each, or 6 for \$4.00. Safe arrival guaranteed.

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Headquarters for Bee-Keepers' Supplies,

S.W. Cor. Front and Walnut Sts.

Catalog on application. CINCINNATI, O.

Please mention Bee Journal when writing Advertisers.

the change from smoking to pounding, and from pounding to smoking, was made every two seconds or every thirty seconds.

Another thing: If I understand correctly, it is somewhat important that the queen to be introduced be in the full tide of laying; or, in other words, that she be taken from one hive and put directly into another without any material stoppage in laying. If that be so, it will be of very little practical use to many. At the most, it could only be of value in the case of taking a queen from a nucleus to be introduced to a colony in the same yard. But will Mr. McNeal tell us what about a queen received through the mail—caged for several days? Or a queen taken to an out-apiary?

It will also help to decide as to the value of the practice, if Mr. McNeal will tell us how many times he has tried the plan, and how many failures, if any, he has had. A. V.

Use of Bisulphide of Carbon.

In the convention proceedings, pages 692 and 693, Mr. Benton, in speaking of the use of bisulphide of carbon as a destroyer of the bee-moth, raises the question whether any one had advocated this prior to his doing so five or six years ago. I wish to state that in the files of the American Bee Journal of 12 to 15 years ago (during Mr. Newman's time), there is a short statement as to its use for that purpose by G. R. Pierce, of this State. Mr. Pierce does not now reside where he did, and his present residence is unknown to me, but I thought it no more than fair to make this statement in his behalf. N. P. SELDEN.

Benton Co., Iowa, Oct. 31.

Selling Honey and Other Things.

"Good evening, Mr. Hustler, I am glad you came, for if I don't talk about bees once in a while I get lonesome."

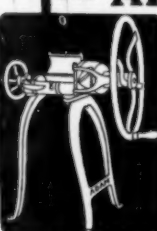
Now, Mr. H. lives some 10 or 12 miles from my place, but he comes this way once in a while to buy lumber, as there is a saw-mill in the woods near us, and he picks what trees he wants to fill his orders with; so he stays around town till they are sawed, as he wants them at once, and then he has a little time to talk bees.

"Yes," says he, "I have been stirred up lately over some articles of Doolittle's in Gleanings in Bee-Culture and the American Bee Journal. In the former he has an article on selling honey, which coincides with my idea of the way honey or anything else should be pushed off your hands, and the 'tin' gotten into your pocket."

"That is all right," says I, "but a good salesman doesn't have to lower the price in order to sell, as he advises. There are always two sides to all questions, and both sides should be made public, for a thing might work well in one locality and not in another. For instance, suppose I sold my honey for one cent per pound less than it would net me wholesale in the city markets, as I understand by his advice, that is, to sell at 12 cents per pound when it is quoted at 15 cents in the bee-papers, it costing the two cents to market it. Now, I have 1000 pounds of honey to dispose of, and can manage, by a little push, to sell 700 pounds of it to families in my vicinity for 12 cents, and have 300 pounds left to dispose of, what can I do with the balance? It will not pay me to go over the ground again, for the sales will be so slow that I could not get pay for time, and I do not want to keep it over till next year, so I would better sell it at some price, and as there is not enough to sell on commission I go to my village store and try to get them to take it; they will not handle it short of two cents per pound, and as I have already sold it under their noses for 12 cents, I can not expect to get more than 10 cents for it, so I dispose of the balance at that price. Now, don't you see, you have the market price at 12 cents retail and 10 cents wholesale, which would be the price everywhere, should bee-keepers follow Doolittle's advice generally. It might be well enough in certain localities, where everything else is cheap, but in my section of the country, where I am getting 20 cents per pound retail, and \$2.00 for 12 pounds at the stores, it would not work at all.

Now, bear in mind that if Doolittle's

ALWAYS READY.
The **ADAM** *Green Bone*
CUTTER



is always clean and ready for work. Impossible to choke it up. Cleans itself. **The Only Bone Cutter** with all ball bearings. Works quickly and easily. No choking or injuring of fowls by slivers or sharp pieces. Cuts a clean light shave that is easily digested by smallest chicks. Send for Catalog No. 4. Contains much valuable information on the cut bone question. You will be pleased with it. Sent free upon request.
W. J. ADAM, JOLIET, ILLS.

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Dittmer's Foundation!

Retail—Wholesale—Jobbing.

I use a PROCESS that produces EVERY ESSENTIAL necessary to make it the BEST and MOST desirable in all respects. My PROCESS and AUTOMATIC MACHINES are my own inventions, which enable me to SELL FOUNDATION and

Work Wax Into Foundation For Cash

at prices that are the lowest. Catalog giving

Full Line of Supplies,

with prices and samples, free on application BEEWAX WANTED.

GUS. DITTMER, Augusta, Wis.

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200-Egg Incubator for \$12.80
Perfect in construction and action. Hatches every fertile egg. Write for catalogue to-day.
GEO. H. STAHL, Quincy, Ill.

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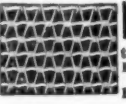
The Emerson Binder

This Emerson stiff-board Binder with cloth back for the American Bee Journal we mail for but 60 cents; or we will send it with the Bee Journal for one year—both for only \$1.40. It is a fine thing to preserve the copies of the Journal as fast as they are received. If you have this "Emerson" no further binding is necessary.

GEORGE W. YORK & CO.,

144 & 146 Erie Street,

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FENCE! STRONGEST MADE. Built strong. Chicken-tight. Sold to the Farmer at Wholesale Prices. Fully Warranted. Catalog Free. COILED SPRING FENCE CO., Box 89 Winchester, Indiana, U. S. A.

47Dt

Please mention the Bee Journal.

For Thanksgiving Day

the Nickel Plate Road will sell tickets within distances of 150 miles Nov. 27 and 28, at rate of a fare and one-third for the round trip. Tickets good returning until Nov. 29, inclusive. This road has three express trains daily to Fort Wayne, Cleveland, Erie, Buffalo, New York and Boston, with vestibuled sleeping-cars. Also excellent dining-car service; meals served on Individual Club Plan, ranging in price from 35 cents to \$1.00. For reservations in sleeping-cars or other information address John Y. Calahan, General Agent, 111 Adams St. City Ticket Office, 111 Adams Street, Chicago. Phone 2057 Central. 42-46A2t

advice is followed throughout the country (and of course he meant it for all localities), the selling price would be 10 cents per pound wholesale, for the storekeepers would pay no more to the city dealers than to the farmer so long as they can buy of the latter. But there might come a time when they could not buy of the bee-keepers, and, the city dealer, seeing his chance to keep the man's trade, sells him honey for 10 cents per pound, until finally the price will drop to that figure; then, of course, the commission men will have to sell at 10 cents or less. The freight and commission will have to come out of that, which, according to Doolittle, will bring the honey down so the producer will not realize more than 8 cents, and which will now be the established price. So you see the bee-keeper will have to start all over again, and in the end find himself as bad off as ever. This underselling is one reason why the prices are so much lower now than they were a few years ago."

"Oh yes," says Mr. H., "I see now why men should not jump at everything that is printed in the bee-papers, or in any other papers, before considering both sides. I know I once bought some honey-jars that were recommended very highly, and what they had to say about them in their catalog might be all true, but after they had been washed and filled with honey they would break standing still, and so, of course, were good for nothing."

"That 'General Rejoinder' article on long-tongued bees suited me to a dot. The way he accused some people of pushing things in a sort of one-sided way, without at the same time trying to draw out the truth on the opposite side, so that both sides would have an equal show, was pleasing."

"I want to interrupt you there," Mr. H. "Not that I like to see things presented in a one-sided way in the reading columns of a bee-paper in order to sell an article, but whenever anybody has anything new I want to see it shown up in the reading columns of the bee-papers, for, had I not seen some new ideas advanced in the body of the papers, I would be all behind the times now, for I do not study the advertisements enough to 'catch on,' but I don't by any means believe in showing up only one side. I believe, when any one has an article to sell, he should give the bad qualities as well as the good. I know it is not always good policy, if you want to make a sale, to show up the worst side prominently, nor is it natural for people in general to do so. A salesman who does not show the good qualities and leave out the bad, is not considered a good man; but I am talking for the interest of the buyer now. There once lived in this town (say 50 years ago) two good men, one by the name of Collar and the other by that of Chandler. Now, Mr. Collar had a cow to sell, and Mr. Chandler wanted to buy one. The latter thought himself a shrewd buyer, and when he got caught he would not squeal, as some do. Mr. Collar told the truth so far as he told anything, but he did not think himself bound to tell any more than was asked. He answered all of Mr. Chandler's questions—that the cow was orderly, would not kick, gave a good quantity of milk, and good milk. She was in good condition, and her teats were not sore, and she did not leak her milk. Mr. Chandler was very particular about asking in regard to the cow leaking her milk. After he had asked all the questions he could think of, he bought her at a fair price. He got her home and tried to milk her, but at first could not get a drop, she milked so hard. Well, the next Sunday, when he met Mr. Collar at church, he took him to one side and said, 'I thought you told me that cow would not leak her milk.' That was all the kicking there was about it. You can see the moral."

"Good bye." J. L. HYDE.
Windham Co., Conn., Sept. 7.

1901—Bee-Keepers' Supplies!

We can furnish you with The A. I. Root Co's goods at wholesale or retail at their prices. We can save you freight, and ship promptly. Market price paid for beeswax. Send for our 1901 catalog. M. H. HUNT & SON, Bell Branch, Wayne Co., Mich

Please mention Bee Journal when writing advertisers.



Queens for Breeders.

"Breed from the best" has been the watchword with myself as well as others. F. B. Simpson, in Bee-Keepers' Review, says we're off. Given five queens from the same mother, which five queens uniformly yield about 40 pounds more than the average, and another five from another mother, which five zigzag all around from 35 below to 90 above the average, and he will breed from the first five rather than from the one that runs 90 above the average. Now, if F. B. will tell us, as I am afraid he will, that all intelligent breeders of note will agree with him, I'll promptly 'bout face and stand in line with him; but if he's only giving his own opinion, I've a choice assortment of abusive epithets laid up for him, and a lot of brickbats to fling at his battlements. I ought to explain that he reasons that the one that runs 90 above the average is a freak that will not give uniform results, while the five of the other mother, being uniform, may be relied upon for future results.—[The recommendation of F. B. Simpson is one that we have been carrying out in practice for several years. A breeder whose queens are irregular, zigzagging from one extreme to the other, is one that will cause complaints from customers; but one that will give uniform results in markings,

SWEET CLOVER

And Several Other Clover Seeds.

We have made arrangements so that we can furnish Seed of several of the Clovers by freight or express, at the following prices, cash with the order:

	5lb	10lb	25lb	50lb
Sweet Clover (white)....	\$.60	\$1.00	\$2.25	\$4.00
Sweet Clover (yellow)....	.90	1.70	4.00	7.50
Alsike Clover90	1.70	3.75	7.00
White Clover	1.00	1.90	4.50	8.50
Alfalfa Clover80	1.40	3.25	6.00

Prices subject to market changes.

Single pound 5 cents more than the 5-pound rate, and 10 cents extra for postage and sack.

Add 25 cents to your order, for cartage, if wanted by freight, or 10 cents per pound if wanted by mail.

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POULTRY PAPER.

Send 25 cents for a year's subscription to our Journal, and we will send book, Plans for Poultry-Houses, free. Six months trial subscription to Journal, 10 cents.

INLAND POULTRY JOURNAL, Indianapolis, Ind
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Send for circulars

regarding the oldest and most improved and original Bingham Bee-Smoker. For 23 YEARS THE BEST ON EARTH.
25A1f T. F. BINGHAM, Farwell, Mich.
Please mention Bee Journal when writing.

in prolificness, in gentleness, in every one of her daughters, is the one that we select for a breeder—providing, of course, that these daughters all score a high average; but if Mr. S., or any one else, can find a mother, the bees of whose daughters will average in number of pounds of honey about the same under like conditions—well, we can not do it. The daughters of our best breeder nearly all score well in honey, but there is quite a variation. While the poorest will be no worse than the average, the best will be considerably better. —EDITOR.]—Stray Straw in Gleanings in Bee-Culture.

Breeding for Uniformity.

Readers of the Bee-Keepers' Review who have been accustomed to be told that they should always breed from the best, will gasp when told by F. B. Simpson that instead of breeding from their best they should breed from those that are only a little above the average if they are to have any permanent improvement. He says:

The breeding of queens often recalls to my mind the "fooling the public" adage with variations: "We can breed ideal queens once in awhile, we can average fair queens, and we too often produce worthless ones, but we can not uniformly produce superior queens." Why can we not? Simply because the majority have for years bred their bees on a principle founded on a fallacy—they have continually bred from the least uniform, hoping to obtain uniformity!



FOR GETTING NEW SUBSCRIBERS.

Red Clover Queens FOR 1902 Free

Long-Tongue Variety—Warranted Purely Mated.

We have already arranged with the queen-breeder who furnished Long-Tongue Red Clover Queens for us during the past season, to fill our orders next season. Although fully 95 percent of the untested queens he sent out were purely mated, next season all that he mails for us will be **warranted** purely mated.

We want every one of our present subscribers to have one or more of these money-maker Queens. We have received most excellent reports from the queens we supplied during the past season. And next year our queen-breeder says he expects to be able to send out even better Queens, if that is possible. He is one of the very oldest and best queen-breeders. His bees average quite a good deal the longest tongues of any yet measured. The Breeder he will use is direct from Italy, having imported her himself. Her worker-bees are large, of beautiful color, very gentle, scarcely requiring veil or smoke.

Orders for these fine, "long-reach" Warranted Queens will be filled in rotation—"first come, first served"—beginning as early in June as possible. It is expected that orders can be filled quite promptly (even better than the past season), as a much larger number of queen-rearing nuclei will be run. (But never remove the old queen from the colony until you have received the new one, no matter from whom you order a queen).

All Queens will be guaranteed to arrive in good condition, and will be clipped, unless otherwise ordered.

A Warranted Queen for sending us Only 2 New Yearly Subscribers

In order that every one of our subscribers who wants one of these Warranted Queens next season can easily earn it, we will book your order for one queen for sending us the names and addresses of **two new subscribers** to the American Bee Journal and \$2.00. FURTHERMORE, we will begin to send the Bee Journal to the new subscribers just as soon as they are received here (with the \$2.00), and continue to send it until the end of next year, 1902). So, forward the new subscriptions soon—the sooner sent in the more weekly copies they will receive.

This indeed is an opportunity to get a superior Queen, and at the same time help swell the list of readers of the old American Bee Journal.

We are now ready to book the Queen orders, and also to enroll the new subscriptions. Remember, the sooner you get in your order the earlier you will get your Queen next season, and the more copies of the Bee Journal will the new subscribers receive that you send in. We hope that every one of our present readers will decide to have at least one of these Queens.

Address,

GEORGE W. YORK & CO., 144 & 146 ERIE STREET, CHICAGO, ILL.

How frequently we see the remark: "Whenever I see one queen's colony outstripping everything in my yard, I select her to breed from." As an example, suppose 10 colonies have given the following yields in pounds of honey: 25, 20, 150, 45, 60, 75, 45, 70, 50, 60. Suppose all are equally well bred; the 150-pound queen is "selected." Suppose we find that the first five queens were from one mother, and the last five from another, both of which breeders had given a comparative yield of 60 pounds each. It is evident that the selected queen is the least *uniform*, individually, and also one whose blood shows the greatest variation and the greatest number below the average (it will be noted that the average for each five, and therefore for all, is 60 pounds). We know that 60 percent of her sisters gave yields below that of their mother, and we also know that the average we can expect from her must be far below her own record, and as she is the most variable (from her mother as well as from the average), we can naturally look for even a greater percent of her offspring to go below the average—in short, we are practically certain to get retrogression and degeneration instead of progression; simply because we are breeding from an *individual freak*, instead of from the most consistent representative of the best blood. On the other hand, the second breeding-queen shows but two, or 40 percent below the average, whereas 60 equal or exceed the average, and, therefore, their mother's yield. Therefore, I would breed from the 75-pound, the 70-pound, or the 60-pound queen, from the second mother.

Light Laying for Feeding Queens.

"Ridiculous" is the label that F. B. Simpson, in Bee-Keepers' Review, puts on the notion that keeping a queen in a nucleus will beget longevity in her offspring. Sure. But it had escaped me that any one advocated such a notion. He says his breeders must do their duty in a full-sized hive, so he can compare them with others. All right, F. B.; but after a queen has fully established her reputation I like to give her a light job so as to keep her as long as possible. A queen I'm now trying to winter was born in 1897. After doing extra work during four years I felt she would be insulted if I had said, "Now, let's see what kind of stuff's in you," so I gave her a soft job for 1901.—[You are doing with your breeder just the very thing that we are doing with our best queen.—EDITOR.]—Stray Straw in Gleanings in Bee-Culture.

Beeswax from Different Countries.

This will by no means always be found the same. An interesting summing up of the different kinds is given in Gravenhorst's *Bienenzeitung*, and thus translated in the *Ameri. can Bee-Keeper*:

In Austria the wax is found or produced in the southern portion, equalling the wax produced in buckwheat localities. The provinces of Bohemia, Moravia and Galicia produce a soft wax, although a distinction has to be made between the wax from the western part of Galicia and that from the eastern part. That from the first-named locality has a pitchy odor, while the other possesses the common odor of wax; is red or brown-yellow, and fairly hard. The best of all known waxes is that from Turkey; it is red in color, and demands the highest price. The wax from Greece and its islands is nearly equal to it in quality. The southern part of France produces wax of better quality than the north. The wax from Spain is about as good as the best produced in France. Italy produces much good wax.

The wax of India is a grayish-brown, and has almost no odor. The wax produced upon the islands, as Timor and Flores, etc., is of importance. Quantities of the product have been exported to China, where a great deal is consumed and also produced.

Egypt, Morocco and the Barbary States furnish a considerable quantity of very impure wax. Beeswax from the Senegal is rather poor and dark-brown in color, accompanied by an unpleasant odor. Very good

wax is produced in Guinea; it is hard and yellow, about as good as Russian wax. The American wax is usually dark and difficult to bleach. From Guadalupe black wax from wild bees is brought into the markets. It can not be bleached out.

CONVENTION NOTICES.

Chicago.—The executive committee of the Chicago Bee-Keepers' Association has ordered that the next meeting be held all day and evening, Dec. 5, 1901, at the Briggs House club-room. This is arranged on account of the low rates to be in force then for the International Live-Stock Exposition in Chicago at that time (Nov. 30 to Dec. 7), being one fare plus \$2.00 for the round-trip. This notice goes by mail to nearly 300 bee-keepers near Chicago, and should result in the largest attendance we have ever had. Dr. C. C. Miller and Mr. C. P. Dadaut have promised to be present. Let all come.

HERMAN F. MOORE, Sec.

GEORGE W. YORK, Pres.

Minnesota.—The Minnesota Bee-Keepers' Association will meet in Plymouth Church, Cor. 8th St. and Nicollet Ave., Minneapolis, Minn., Wednesday and Thursday, Dec. 4 and 5, 1901. Mr. W. Z. Hutchinson will give a stereopticon lecture on Wednesday evening, and a good program is prepared and now in the hands of the printer. Joining the National Bee-Keepers' Association in a body will be voted on Wednesday. All bee keepers and those interested in bees are invited.

H. G. ACKLIN,

Chairman Executive Committee.

New York.—There will be a bee-keepers' convention (annual) held in Canandaigua, N. Y., by the Ontario Co., N. Y., Bee-Keepers' Association, Dec. 13 and 14, 1901.

Naples, N. Y. FRIEDEMANN GREINER, Sec.

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Fancy White Comb Honey in no-drip cases; also Extracted Honey. State price, delivered. We pay spot cash. FRED W. MUTH & Co., Front & Walnut Sts., Cincinnati, Ohio. Reference—German National Bank, Cincinnati. 40A5t Please mention the Bee Journal.

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Car Lots or otherwise: will pay highest market price, spot cash. Address, stating quantity, quality, and price desired at your station. Will send man to receive when lot is large enough to justify. THOS. C. STANLEY & SON, 31Atf FAIRFIELD, ILL. Please mention Bee Journal when writing.

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Comb Honey and Beeswax. State price delivered in Cincinnati. G. H. W. WEBER, 43Atf 2146-2148 Central Ave., CINCINNATI, O.

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Thanksgiving Day Excursions

on all trains of the Nickel Plate Road, on Nov. 27 and 28, to points within 150 miles, and good returning Nov. 29, 1901. Chicago Depot, Van Buren St., near Clark St., on Elevated Loop. City Ticket Office, 111 Adams Street. Also Union Ticket Office, Auditorium Annex. Phone 2047 Central. 41-46A2t

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HONEY AND BEESWAX

MARKET QUOTATIONS.

CHICAGO, Nov. 1.—The market is easier in tone, while prices are nominally the same, but would be shaded to effect sales. Some cars of honey enroute to the Eastern cities have been diverted to this and surrounding points, which is having a depressing effect. Comb brings 14@15c for best grades of white; light amber, 12@13c; dark grades, 10@11c. Extracted, white, 5½@6½c, according to quality, flavor and package; light amber, 5¼@5½c; amber and dark, 5@5½c. Beeswax, 28c. R. A. BURNETT & Co.

CINCINNATI, Oct. 25.—The honey market is rather dull on account of the warm weather. Extracted sells only to manufacturers from 5@6c; better grades alfalfa water-white from 6@7c; white clover from 8@9c. Fancy white comb honey sells from 13¼@15¼c. C. H. W. WEBER.

ALBANY, N. Y., Oct. 25.—Honey in good demand now, as this is the most satisfactory time to sell. Grocersmen are stocking up and will buy lines, when late they only buy enough to piece out. Fancy white comb, 15@16c; mixed, 14@15c; buckwheat, 12@13c. Extracted, white, 6½@7½c; mixed, 6@6½c. H. R. WRIGHT.

OMAHA, Oct. 25.—New comb honey is arriving by express in small quantities from Iowa and Colorado, and selling at \$3.50 per case in a retail way. California extracted honey is being offered carlots at 4¼@4½c per pound, f.o.b. California shipping-points, but we have not heard of any sales having been made thus far. The production of extracted honey seems to be quite large this year in Colorado, Utah and California. PEYCKE BROS.

NEW YORK, Nov. 8.—Comb honey is in good demand, and while the market is not overstocked, receipts are sufficient to supply the demand. Fancy white sells at 15c, with an occasional sale at 16c for attractive lots; No. 1, white, at 14c; No. 2, at 13c; fancy buckwheat, 11@11½c; No. 1 and 2 at from 10@10½c. Extracted remains quiet at from 6@6½c for white, and 5½@5¾c for amber. Very little demand for dark at 5¼@5½c. Beeswax quiet at from 27@28c. HILDRETH & SEGELKEN.

BOSTON, Oct. 21.—There is a fairly good demand for stocks with ample supplies at the present writing. Fancy No. 1, in cartons, 15¼@16c; A No. 1, in cartons, 15@15½c; No. 1, 15c; very little No. 2 is being received; glass-front cases will bring about ¼c per pound less. Light California extracted, 7¼@8c; Florida honey, 6½@7c. BLAKE, SCOTT & LEE.

DES MOINES, Oct. 25.—There is very little doing here in new crop of honey. Some small lots of near-by produced comb honey are on the market and selling in a retail way at \$3.50 to \$3.75 per case. We do not look for much trade in this line before Sept. 1. Our market does not consume a great deal of extracted honey. PEYCKE BROS. & CHANEY.

DETROIT, Oct. 25.—Fancy white comb honey, 14@15c; No. 1, 13@14c; no dark to quote. Extracted, white, 6@7c. Beeswax, 25@26c. M. H. HUNT & SON.

SAN FRANCISCO, Nov. 6.—White comb, 10@12 cents; amber, 7@9c; dark, 6@7 cents. Extracted, white, 5¼@—; light amber, 4¼@—; amber, 4@—.

Shipments from this port by sea for the season to date aggregate nearly 4,000 cases, mostly extracted, while for corresponding period last year the quantity forwarded outward by water routes did not exceed 1,500 cases. In values there are no appreciable changes to record, market showing steadiness.

KANSAS CITY, Oct. 25.—Up to the present time only small lots of new comb honey have been on the market, and these met with ready sale on the basis of 15@16c per pound for fancy white. For next week heavier receipts are expected and quotations are issued at \$3.10@3.25 per case for large lots, which would be equal to about 14@14½c; the demand being quite brisk, a firm market is anticipated. Inquiries for extracted are a little more numerous, but large buyers still seem to have their ideas too low. In a small way 5¼@6c is quotable. PEYCKE BROS.

BARGAIN!

Apiary of 50 cols. Ital.; 10-fr. Lang. for Ext. and comb; good locality; all fixtures; and farm if wanted. DR. G. W. BISTLINE, BLY, TITUS CO., TEX.

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The MONETTE Queen-Clipping Device is a fine thing for use in catching and clipping Queens wings. We mail it for 25 cents; or will send it FREE as a premium for sending us ONE NEW subscriber to the Bee Journal for a year at \$1.00; or for \$1.20 we will mail the Bee Journal one year

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"THE HUM OF THE BEES in the APPLE-TREE BLOOM"

Written by

EUGENE SECOR and DR. C. C. MILLER.

PRICES—Either song will be mailed for 10 cents (stamps or silver), or both for only 15 cents. Or, for \$1.00 *strictly in advance* payment of a year's subscription to the American Bee Journal, we will mail both of these songs free, if asked for.

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Texas Bee-Keepers.

New Branch Office. We beg to announce the opening of a branch office and warehouse at 438 W. Houston St., San Antonio, Texas. Rates of transportation from Medina in less than car-load lots are high, and it takes a long time for a local shipment to reach Southern Texas points.

**Low Freight and
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To secure these two necessary advantages—low freight and quick delivery—and to be better prepared to serve the interests of our Texas friends, is our reason for establishing this new branch office. No other point in Southern Texas is better adapted to serve as a distributing point than San Antonio. It has four great railroads—the Southern Pacific R. R. east and West—the International and Great Northern R. R. from Laredo up through San Antonio and Central Texas, the San Antonio and Arkansas Pass R. R., and San Antonio and Gulf R. R. It also has the American, Wells-Fargo and Pacific Express Companies.

Our Managers.

We have secured as managers Mr. Udo Toepperwein, formerly of Leon Springs, and Mr. A. Y. Walton, Jr., both of whom are well known to the bee-keepers of South and Central Texas. They are also thoroughly familiar with practical bee-keeping and all matters associated with it, and any orders sent to this branch will receive prompt, careful attention.

Our Goods.

As usual our motto is to furnish the best goods of the most approved pattern. We do not undertake to compete in price with all manufacturers. Bee-keepers have learned that it does not pay to buy cheap supplies, for a saving of 10 cents on the first cost of a hive may be a loss of many times this amount by getting poorly made and ill-fitting material. Every year brings us many proofs that our policy of "the best goods" is a correct one.

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Very few changes in prices will be made in our new catalog, so do not delay your order, but send it at once. You will be allowed a refund if lower prices are made, and in case of higher prices ruling in the new catalog, if any, you will secure the benefit by ordering now. Catalog and estimates may be had by applying to the address given below.

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